

Abstract

The invention relates to an ultrasonic flow measuring device (1), which is distinguished by a low energy consumption. According to the invention, a control/evaluation unit (11) ascertains a plurality of sampled values (a_i with $i = 1, 2, 3, \dots$) of a received measuring signal at defined points in time (t) of a predetermined time range and interpolates the sampled values by a continuous function (f(t)), wherein the continuous function (f(t)) is formed by a sum of a predetermined number ($n \in \mathbb{N}$) of wavelets (W) and wherein each wavelet (W) corresponds to the product of a sampled value with a sinc function ($\frac{\sin(x)}{x}$) and with a Gaussian bell curve ($e^{-\alpha^2}$, $\alpha \in \mathbb{R}$).